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EXAMINER

CHANKONG, DOHM

ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/843,768

Applicant(s)

HSIEH ET AL.

Examiner

Dohm Chankong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1> Claims 1-26 are presented for examination.

Claim Rejections - 35 USC § 102

2> The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3> Claims 1-8, 11, 12, 14-17, 19 and 20 are rejected under 35 U.S.C § 102(b) as being unpatentable over Gille, U.S Patent No. 5,874,964.

4> As to claim 1, Gille discloses a graphical user interface for network configuration of a plurality of devices [column 3 <lines 31-33>], said graphical user interface comprising:

a first user interface element actuable to access a first portion of said graphical user interface, which first portion displays information associated with a plurality of virtual local area networks (VLANs) associated with said plurality of devices [column 2 <lines 55-64> | column 3 <lines 19-40> where: a sub-window is equivalent in functionality to the claimed first user interface element].

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5> As to claim 2, Gille discloses the graphical user interface of claim 1, wherein said first user interface is a link which is actuable via a pointing device and a cursor displayed on said graphical user interface [column 3 <lines 40-54>].

6> As to claim 3, Gille discloses the graphical user interface of claim 1, wherein said first portion of said graphical user interface includes a screen wherein a user can select from a plurality of data centers and a plurality of customers to access said information associated with said plurality of devices that correspond to said customer [Figure 4 <items 92, 98, 99> | column 8 <lines 42-44> where: each building corresponds to a data center].

7> As to claim 4, Gille discloses the graphical user interface of claim 1, wherein said first portion includes, as said information associated with said plurality of VLANs, a plurality of VLAN names [Figure 6 <item 152> | column 12 <lines 30-64>].

8> As to claim 5, Gille discloses the graphical user interface of claim 4, wherein each of said plurality of VLAN names is linked to a second portion of said graphical user interface, which second portion displays a status of each of a plurality of IP addresses associated with a selected VLAN [column 9 <lines 18-29> | column 12 <lines 30-64>].

9> As to claim 6, Gille discloses the graphical user interface of claim 1, wherein said first portion includes, as said information associated with said plurality of VLANs, a plurality of compartment names that each identify a compartment within which a corresponding VLAN

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is disposed [Figure 4 | column 6 <lines 20-34> where: the floor of each building corresponds to a compartment].

10> As to claim 7, Gille discloses the graphical user interface of claim 6, wherein each of said plurality of compartment names is linked to a second portion of said graphical user interface, which second portion displays all of the VLANs associated with a selected compartment [Figure 4 <items 92,94> | column 8 <lines 15-22 and 42-59> where: each floor in the building is implemented as a VLAN].

11> As to claim 8, Gille discloses the graphical user interface of claim 1, wherein said first portion includes, as said information associated with said plurality of VLANs, a plurality of description fields, each of which provides a textual description of a corresponding VLAN [Figure 5 | Figure 6 where: workgroup, members contain description fields describing information relating to the VLAN].

12> As to claim 11, Gille discloses the graphical user interface of claim 1, wherein said first portion includes, as said information associated with said plurality of VLANs, a plurality of status fields, each of which identifies a status of a corresponding VLAN [Figures 6 and 7 | column 10 <lines 42-48> where: the categories of the VLAN are comparable to status fields as they show the status of the members within the VLAN].

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13> As to claim 12, Gille discloses the graphical user interface of claim 1, wherein said first portion includes, as said information associated with said plurality of VLANs, a plurality of subnet fields, each of which identifies an internet protocol (IP) address space assigned to a corresponding VLAN [column 6 <line 55> to column 7 <line 14> | column 9 <lines 18-29>] .

14> As to claim 14, Gille discloses the graphical user interface of claim 1, wherein said first portion includes, as said information associated with said plurality of VLANs, a plurality of domain fields, each of which indicates a broadcast domain associated with a corresponding VLAN [column 6 <line 64> to column 7 <line 3> where: the segment is comparable to a domain (and the VNA IDs and segment address are comparable to the domain fields) as the segment address identifies each particular VLAN].

15> As to claim 15, Gille discloses the graphical user interface of claim 1, wherein said first portion includes, as said information associated with said plurality of VLANs, a list of all of the VLANs located in a particular compartment [Figure 4 <items 92,94> | Figure 6 | column 8 <lines 15-19> | column 10 <lines 35-41> | column 14 <lines 31-36> where: each VLAN is located on each floor, or 'enclosure'].

16> As to claim 16, Gille discloses the graphical user interface of claim 1, wherein said first portion includes, as said information associated with said plurality of VLANs, a plurality of sub-type fields, each of which defines a role of a corresponding VLAN within a customer's infrastructure [Figure 4 <items 92, 94> | column 6 <lines 20-34> | column 8 <lines 15-19> where:

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the enclosure category describes the role of the VLAN (network for floor 1) within the whole network infrastructure].

17> As to claim 17, Gille discloses the graphical user interface of claim 1, wherein said graphical user interface further comprises:

a second user interface element actuable to view additional information associated with a selected VLAN [Figures 6 and 7].

18> As to claim 19, Gille discloses the graphical user interface of claim 17, wherein said additional information includes a hostname associated with each IP address assigned to said selected VLAN [column 6 <lines 55-58> | column 6 <line 64> to column 7 <line 1> | column 9 <lines 18-39> where: 'John Doe' is the hostname for the port; the port is assigned an IP address and is associated with a particular VLAN].

19> As to claim 20, Gille discloses the graphical user interface of claim 1, wherein said graphical user interface further comprises:

a second user interface element actuable to edit additional information associated with a selected VLAN [column 10 <lines 1-33 and lines 49-65>].

Claim Rejections - 35 USC § 103

20> The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21> Claims 9 and 10 are rejected under 35 U.S.C § 103(a) as being unpatentable over Gille, in view of Varghese et al, U.S Patent No. 5,963,556 ["Varghese"].

22> As to claim 9, Gille does not specifically disclose a graphical user interface wherein said first portion includes, as said information associated with said plurality of VLANs, a plurality of type fields, each of which identifies a type of a corresponding VLAN.

23> Varghese teaches a graphical user interface wherein a portion includes a plurality of type fields, each of which identifies a type of a corresponding VLAN [Figure 6 <item 200> | column 12 <lines 6-10>]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include Varghese's type classification of VLANs into Gille for the obtained advantage of classifying and recording information about the VLAN.

24> As to claim 10, Gille does not disclose a GUI wherein said type field can include a value of one of: server, public, embryo, console.

25> Varghese discloses a graphical user interface wherein said type field can include a value of one of: server, public, embryo, console [column 5 <lines 27-35>]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gille

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to include Varghese's type field classifications to properly identify the type of VLAN to the user.

26> Claim 13 is rejected under 35 U.S.C § 103(a) as being unpatentable over Gille in view of Barker et al, U.S Patent No. 6,052,819 ["Barker"].

27> As to claim 13, Gille does disclose a GUI wherein each of said subnet fields contain IP address range values but does not specifically disclose that said values are expressed using a classless inter-domain routing (CIDR) protocol.

28> Barker teaches IP expression using CIDR protocol [column 13 <lines 5-27>]; Barker further goes on to teach the advantage of using CIDR as a means of organizing host IDs into sets of IDs for the networks in the specific domain. Therefore, it would have been obvious to one of ordinary skill in the art to implement Barker's use of the CIDR protocol in Gille's GUI address expression to obtain the benefits of using subnetwork masks to route data to the proper part of the network as specified by the network ID. This technique of subdividing networks into smaller, relevant networks is suggested by Gille [column 6 <lines 20-25>].

29> Claims 18 is rejected under 35 U.S.C § 103(a) as being unpatentable over Gille, in view of Miyake et al, U.S Patent No. 6,789,090 ["Miyake"].

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30> Gille does not disclose a GUI wherein said additional information includes a status of each IP address assigned to said selected VLAN.

31> Miyake discloses a graphical user interface with information associated with a VLAN including a status of each IP address assigned to said selected VLAN [Figure 12 <item 502> | column 14 <lines 47-58>]. Miyake teaches that this functionality is useful for network management of IP addresses. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include Miyake's status functionality into Gille's graphical user interface to allow administrators to monitor the status of IP addresses in their network.

32> Claim 21 is rejected under 35 U.S.C § 103(a) as being unpatentable over Gille, in view of an Official Notice.

33> Gille does not specifically disclose a GUI wherein said actuation of said second user interface elements results in an edit screen being displayed for said selected VLAN, wherein a user can enter at least one of a VLAN name, a pool name and a description.

34> Official Notice is taken that it is well known and expected in the art to include name editing functionality into Gille's VLAN names. Doing so would allow an administrator to give VLANs appropriate names so as to be easily identifiable by users.

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35> Claims 22 and 25 are rejected under 35 U.S.C § 103(a) as being unpatentable over Gille, in view of Campion et al, U.S Patent No. 6,249,813 ["Campion"].

36> As to claim 24, Gille does disclose a graphical user interface of claim 1, wherein said first portion includes hostnames for a selected VLANs [Figure 6 <item 152>] but does not specifically disclose generating at least one hostname for a selected VLAN.

37> Campion discloses a method of generating hostnames for networks [abstract | claim 4]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include Campion's name generation technique in Gille's graphical user interface to obtain the advantage of insuring unique hostnames for each virtual network in Gille's system [column 4 <lines 66-67>].

38> As to claim 25, Gille does disclose a graphical user interface of claim 1, wherein said first portion includes hostnames for a selected VLANs [Figure 6 <item 152>] but does not specifically disclose generating a plurality of hostname for a selected VLAN.

39> Campion discloses a method of generating hostnames for networks [abstract | claim 4]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include Campion's name generation technique in Gille's graphical user interface to obtain the advantage of insuring unique hostnames for each virtual network in Gille's system [column 4 <lines 66-67>].

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40> Claim 23 is rejected under 35 U.S.C § 103(a) as being unpatentable over Gille and
Campion, in further view of Miyake.

41> Gille does not disclose a GUI wherein said mechanism is actuable to generate said at
least one hostname for an unassigned IP address associated with said selected VLAN.

42> Miyake discloses a mechanism actuable to generate said at least one hostname for an
unassigned IP address associated with said selected VLAN [Figure 18 | column 20 <lines 29-
41> where: the table and the contents of the table, including the computer names are
generated by the supervising manager program]. it would have been obvious to one of
ordinary skill in the art at the time the invention was made to include Miyake's name
generation technique in Gille's graphical user interface to obtain the same advantage stated
above for claim 22, of insuring unique hostnames for each IP address in Gille's system.

43> Claim 24 is rejected under 35 U.S.C § 103(a) as being unpatentable over Gille, in view
of Gai et al, U.S Patent No. 6,697,360 ["Gai"].

44> Gille does not disclose a GUI wherein said first portion includes, as said information
associated with said plurality of VLANs, a mechanism for generating at least one dynamic
host configuration protocol (DHCP) reservation for an available IP address associated with
said VLAN.

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45> Gai teaches a device that generates at least one DHCP reservation for an available IP address associated with a VLAN [abstract | column 11 <lines 13-30>] for the obtained advantage of gaining a unique IP address for a specific VLAN. Therefore it would have been obvious to one of ordinary skill in the art to implement Gai's DHCP reservation means into Gille to insure that the IP addresses allocated to a VLAN are unique and distinct from other subnetworks.

46> Claim 26 is rejected under 35 U.S.C § 103(a) as being unpatentable over Gille.

47> As to claim 26, Gille discloses the graphical user interface of claim 1, wherein said first portion includes, as said information associated with said plurality of VLANs, a GUI element with multiple VLANs but does not disclose that it is actuatable to add another VLAN to a customer's infrastructure. Nevertheless, Gille does disclose that the GUI is capable of editing multiple VLANs [column 6 <lines 21-25> | column 10 <lines 35-41>] and therefore would have been obvious to one of ordinary skill in the art that Gille's GUI would include an option to add additional VLANs to the network.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (703)305-8864.

The examiner can normally be reached on 8:00AM - 5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DC



Dung C. Dinh
Primary Examiner